

**WHAT IS CLAIMED IS:**

1. A system for automatically initiating a telephone call  
over a computer network, comprising:

an address interceptor, associated with a station of a  
circuit-switched telephone network, that receives calling number  
identification signals from said circuit-switched telephone network  
and extracts therefrom a destination address; and

a network call initiator, coupled to said address interceptor  
and associated with a computer network terminal, that employs said  
destination address to initiate said telephone call via said  
computer network terminal.

2. The system as recited in Claim 1 wherein said calling  
number identification signals and said destination address are  
associated with a single location.

3. The system as recited in Claim 1 wherein said destination  
address is selected from the group consisting of:

a telephone number,

an Internet Protocol address,

a Voice over Internet Protocol (VoIP) gateway address, and

a VoIP gateway address combined with a telephone number.

4. The system as recited in Claim 1 wherein said computer  
2 network is the Internet.

5. The system as recited in Claim 1 wherein said station  
2 leaves unanswered a call transmitting said calling number  
3 identification signals.

6. The system as recited in Claim 1 wherein said calling  
2 number identification signals are associated with a second station,  
3 said second station hanging up after a predetermined number of  
4 unanswered rings.

7. The system as recited in Claim 1 wherein said station and  
2 said computer network terminal are embodied in a computer and  
3 wherein a single telephone line alternatively couples said station  
4 to said circuit-switched telephone network and said computer  
5 network terminal to said computer network.

8. A method of automatically initiating a telephone call  
2 over a computer network, comprising:  
3 extracting a destination address from calling number  
4 identification signals received from a circuit-switched telephone  
5 network; and  
6 employing said destination address to initiate said telephone  
7 call.

9. The method as recited in Claim 8 wherein said calling  
2 number identification signals and said destination address are  
3 associated with a single location.

10. The method as recited in Claim 8 wherein said  
2 destination address is selected from the group consisting of:  
3 a telephone number,  
4 an Internet Protocol address,  
5 a Voice over Internet Protocol (VoIP) gateway address, and  
6 a VoIP gateway address combined with a telephone number.

11. The method as recited in Claim 8 wherein said computer  
2 network is the Internet.

12. The method as recited in Claim 8 further comprising  
2 leaving unanswered a call transmitting said calling number  
3 identification signals.

13. The method as recited in Claim 8 wherein said calling  
2 number identification signals are associated with a station, said  
3 method further comprising hanging up said station after a  
4 predetermined number of unanswered rings.

14. The method as recited in Claim 8 wherein said method is  
carried out in a computer and wherein a single telephone line  
alternatively carries said calling number identification signals  
and said destination address.

15. A computer, comprising:

a processor;

a memory coupled to said processor;

a display coupled to said processor;

at least one input device coupled to said processor;

a circuit-switched telephone network interface, coupled to said processor, for receiving a call from a circuit-switched telephone network couplable thereto, said call including calling number identification signals;

a computer network interface, coupled to said processor, for allowing said computer to communicate over a computer network;

an address interceptor, coupled to said processor and communicable with said circuit-switched telephone network interface, for extracting a destination address from said calling number identification signals; and

a network call initiator, coupled to said processor, for employing said destination address to initiate said telephone call via said computer network interface.

16. The computer as recited in Claim 15 wherein said calling number identification signals and said destination address are associated with a single location.

17. The computer as recited in Claim 15 wherein said  
2 destination address is selected from the group consisting of:  
3 a telephone number,  
4 an Internet Protocol address,  
5 a Voice over Internet Protocol (VoIP) gateway address, and  
6 a VoIP gateway address combined with a telephone number.

18. The computer as recited in Claim 15 wherein said computer  
2 network is the Internet.

19. The computer as recited in Claim 15 wherein said circuit-  
2 switched telephone network interface leaves said call unanswered.

20. The computer as recited in Claim 15 wherein a station  
2 placing said call hangs up after a predetermined number of  
3 unanswered rings.

21. The computer as recited in Claim 15 wherein said circuit-  
2 switched telephone network interface and said computer network  
3 interface are coupled to a single telephone line.